

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) A process for inactivating and/or reducing pathogens from tissue having a plurality of cavities in which pathogens reside comprising:

centrifuging the tissue in a centrifuge with a flowing pathogen solvent reducing solution wherein the solution is flowed continuously to and away from the centrifuge containing the tissue during the centrifuging, the centrifuge producing a G force on the material to remove material from the tissue and promote penetration into the tissue; and

the centrifuging causing penetration of the pathogen reducing solution into substantially all of the cavities of the tissue where the pathogens reside to thereby inactivate and/or reduce the pathogen content in said cavities.

2. (Original) The process of claim 1 wherein the solvent fluid is selected from at least one of the group consisting of an alcohol, a detergent, an oxidizer, a solvent and a surfactant.

3. Cancelled

4. (Previously presented) The process of claim 1 including infusing a chemically reactive substance during at least one further centrifuging step for breaking down lipids and/or proteins.

5. Cancelled

6. (Previously presented) The process of claim 1 including exposing the tissue to a volume of said reducing solution of greater than 3 liters.

7. Cancelled

8. Cancelled

9. (Previously presented) The process of claim 1 wherein the G force exceeds 1600G.
10. (Previously presented) The process of claim 1 including dry centrifuging the tissue after centrifuging the pathogen reducing solution to remove traces of solvents and debris.
11. (Previously presented) The process of claim 1 wherein the tissue is at least one of cancellous bone, cortical bone, and connective tissue.
12. Cancelled
13. (Previously presented) The process of claim 1 wherein the solvent reducing solution comprises at least one viral and/or bacterial pathogen inactivating solution to inactivate the pathogens.
14. (Previously presented) The process of claim 1 wherein the solvent reducing solution is for inactivating viral and/or bacterial pathogens, the centrifuging for flowing the solvent reducing solution to flush the pathogens from the cavities and inactivate the pathogens in the cavities and then removing the solvent reducing solution carrying the flushed pathogens from the vicinity of the tissue.
15. (Previously presented) The process of claim 1 wherein the tissue comprises bone, the pathogens comprise lipids and/or proteins, the solvent reducing solution for removing the lipids and/or proteins from the bone, the process comprising continuously flowing and centrifuging the pathogen reducing solvents and/or surfactants with the bone so that the solvents and/or surfactants continuously infuse into and out of the cavities of the bone to continuously flush the lipids and/or proteins from the bone.
16. (Previously presented) The process of claim 1 wherein the tissue comprises bone, the pathogens comprise lipids and/or proteins in the tissue cavities, the process for solubilizing the lipids and/or proteins by centrifuging the bone with the pathogen reducing solvent and/or surfactant to cause the pathogen reducing solvent and/or surfactant to flow into substantially all of the cavities of the tissue.
17. (Previously presented) The process of claim 1 including infusing biologically and/or mechanically useful substances into the tissue cavities during a centrifuging step.

18. (Previously presented) The process of claim 17 wherein the infusing step includes infusing at least one antibiotic for forming a tissue preservative during storage of the tissue.
19. (Previously presented) The process of claim 17 wherein the infusing step includes infusing at least one antibiotic forming a tissue preservative during storage of the tissue and at least one tissue growth factor for release from the tissue after implantation of the tissue into an animal.
20. (Previously presented) The process of claim 17 wherein the infusing the mechanically useful substance step includes infusing plasticizer for maintaining the tissue pliability after freeze drying or drying.
21. (Previously presented) The process of claim 17 wherein the infusing the mechanically useful substance step includes infusing glycerol to maintain the tissue pliability after freeze drying or drying.
22. (Previously presented) The process of claim 17 wherein the infusing the mechanically useful substance step includes infusing structurally enhancing materials, which are thermally or chemically set.
23. (Previously presented) The process of claim 17 wherein the infusing the mechanically useful substance step includes infusing polymers, which are thermally or chemically set.
24. Cancelled
25. (Currently Amended) A process for inactivating and/or reducing pathogens in bone tissue having a longitudinal axis and a plurality of cavities in which the pathogens reside comprising centrifuging the tissue in a centrifuge with a pathogen solvent reducing solution to produce a G force on the tissue in a direction parallel to the bone longitudinal axis to remove the material from the tissue and promote solution penetration into the tissue, the centrifuging penetrating the pathogen reducing solution into substantially all of the cavities of the tissue where the pathogens reside to thereby inactivate and/or reduce the pathogen content in said cavities and wherein the pathogen solvent reducing solution is flowed continuously to and away from the centrifuge containing the tissue during the centrifuging.
26. Cancelled

27. (Previously presented) The process of claim 25 where the G force is at least 2000G.
28. Cancelled
29. Cancelled
30. (Previously presented) The process of claim 25 including dry centrifuging the tissue for removing the at least one solvent from the tissue and for removing contaminants separated by the centrifuging from the vicinity of the tissue.
31. (Previously presented) The process of claim 25 including infusing biologically and/or mechanically useful substances into the tissue cavities during a centrifuging step.
32. (Original) The process of claim 31 wherein the infusing step includes infusing at least one antibiotic for forming a tissue preservative during storage of the tissue.
33. (Original) The process of claim 31 wherein the infusing step includes infusing at least one antibiotic forming a tissue preservative during storage of the tissue and at least one tissue growth factor for release from the tissue after implantation of the tissue into an animal.
34. (Original) The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing a plasticizer for maintaining tissue pliability after freeze drying or drying.
35. (Original) The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing glycerol to maintain the tissue pliability after freeze drying or drying.
36. (Original) The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing structurally enhancing materials, which are thermally or chemically set.
37. (Original) The process of claim 31 wherein the infusing the mechanically useful substance step includes infusing polymers, which are thermally or chemically set.
38. (Currently Amended) A process for introduction of at least one growth factor in animal tissue comprising centrifuging the tissue in a centrifuge in the presence of a liquid containing the at least one growth factor and wherein the liquid is flowed continuously to and away from the centrifuge containing the tissue during the centrifuging.

39. (Original) The process of claim 31 wherein the infusing the mechanically useful substance includes infusing a polymer, which may be set by solvent removal, extraction or evaporation.

40-43. Cancelled.

44. (Previously presented) The process of claim 25 wherein the solvent fluid is selected from at least one of the group consisting of an alcohol, a detergent, an oxidizer, a solvent and a surfactant.

45. (Currently Amended) A process for providing infusion of a radiation protectant into tissue having a plurality of cavities comprising centrifuging the tissue in a centrifuge with a solution in a wet spin to produce a G force on the material to remove material from the tissue and promote solution penetration into the tissue, the centrifuging penetration the radiation protectant into substantially all of the cavities of the tissue and wherein the solution is flowed continuously to and away from the centrifuge containing the tissue during the centrifuging.

46. (Currently Cancelled)